CHAPTER 1

INTRODUCTION

1.1 Background

Dewandaru plant is a plant originating from south america. This plant has a fruit that has good properties. Dewandaru fruit can prevent oxidative damage resulting from tree radicals in the human body. Dewandaru fruit has several benefit; antioxidants, antibacterials, pain relievers, blood pressure, prevent cancer.

Dewandaru ripe fruit has a dark red color, while the young one has a green color and a half-baked orange. Due to having a color change at the time raw to mature, the identification maturity is done based on direct observation. Direct observation has a wakness that is influenced by conditions that cause inconsistent identification process.

Based on the problems that occur can be solved by using digital image processing. Digital image processing used using RGB color difference(red, green, blue) from the image of dewandaru fruit. From the RGB color then look or the histogram of each RGB value. After knowing the histogram of each RGB then do calculation by using euclidean distance method to do identification of maturity.

1.2 Scope

Limitations of the research problem:

1. Finding the RGB value on the dewandaru fruit image.
2. Finding the histogram of each RGB.
3. Perform euclidean distance calculation.
4. To analyze the maturity identification of dewandaru fruit.

1.3 Objective

The purpose of this study is identify the maturity dewandaru fruit using image processing.